Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-37. (Cancelled)

38. (New) An electrostatic discharge protection circuit with high trigger current, coupled to a node and a reference potential for dissipating the electrostatic voltage formed at said node, said electrostatic discharge protection circuit comprising:
a substrate having a first conductivity type, coupled to said reference potential;
a well region having a second conductivity type, formed on said substrate and coupled to said node;
a first doping region having said first conductivity type, electrically coupled to said node; and
a second doping region having said second conductivity type, disposed on said substrate and electrically floated on said substrate.

39. (New) The electrostatic discharge protection circuit as claimed in claim 38 further comprising a third doping area having said second conductivity type, disposed in said well region, electrically coupled to said node, for forming an ohmic connection at said well region.

40. (New) The electrostatic discharge protection circuit as claimed in claim 38 further comprising a forth doping region having said first conductivity type, disposed at the surface of said substrate near said well region, electrically coupled to said reference potential, for forming an ohmic connection at said substrate.

41. (New) The electrostatic discharge protection circuit as claimed in claim 38, wherein said first conductivity is p-type, and said second conductivity is n-type.

42. (New) The electrostatic discharge protection circuit as claimed in claim 38 further comprising a fifth doping region having said second conductivity type, disposed at the conjunction of said well region and said substrate, for reducing the breakdown voltage at the conjunction of said well region and said substrate.

43. (New) The electrostatic discharge protection circuit as claimed in claim 42 further comprising a field oxide layer, disposed at the surface of said substrate and between said second and fifth doping regions.

44. (New) The electrostatic discharge protection circuit as claimed in claim 42 further comprising a gate disposed above the surface of said substrate and between said second and fifth doping regions.

45. (New) The electrostatic discharge protection circuit as claimed in claim 44 further comprising:

a resistor with two ends electrically coupled to said gate and said reference

potential, respectively; and

a capacitor with two ends electrically coupled to said gate and said node, respectively.

46. (New) The electrostatic discharge protection circuit as claimed in claim 38, wherein said first conductivity is n-type, and said second conductivity is p-type.

47. (New) The electrostatic discharge protection circuit as claimed in claim 38 further comprising a fifth doping region having said first conductivity type, disposed at the conjunction of said well region and said substrate, for reducing the breakdown voltage at the conjunction of said well region and said substrate.

48. (New) The electrostatic discharge protection circuit as claimed in claim 47 further comprising a field oxide layer, disposed at the surface of said substrate and between said first and fifth doping regions.

49. (New) The electrostatic discharge protection circuit as claimed in claim 47 further comprising a gate disposed above the surface of said substrate and between said first and fifth doping regions.

50. (New) The electrostatic discharge protection circuit as claimed in claim 49 further comprising:

a resistor with two ends electrically coupled to said gate and said node, respectively; and

a capacitor with two ends electrically coupled to said gate and said reference

potential, respectively.

51. (New) The electrostatic discharge protection circuit as claimed in claim 38, wherein
the electrostatic discharge current of said node provides a voltage with sufficient magnitude to breakdown the conjunction interface between said well region and said substrate, also triggering a BIPOLAR JUNCTION TRANSISTOR(BJT) comprising said well region, said substrate and said second doping region, for dissipating said electrostatic discharge current;
and wherein said first doping area, when the electrostatic discharge current is greater than a predetermined current, reduces the potential difference between said node and said reference potential.

52. (New) The electrostatic discharge protection circuit as claimed in claim 51, wherein the BJT has a base, an emitter, and a collector, the emitter and the base being electrically coupled to the node, and the second doping region is electrically floated on the collector region of the BJT.